



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,005	11/20/2001	Eleanor L. Schuler	0607-1006	7962

7590 02/28/2003

William M. Lee, Jr.
Lee, Mann Smith, McWilliams,
Sweeney & Ohlson
P.O. Box 2786
Chicago, IL 60690-2786

EXAMINER-

MARMOR II, CHARLES ALAN

ART UNIT

PAPER NUMBER

3736

DATE MAILED: 02/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/000,005

Applicant(s)

SCHULER ET AL.

Examiner

Charles A. Marmor, II

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12, 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 12, it is unclear how the recorder is structurally related to the other elements of the apparatus.

Regarding claim 14, it is unclear whether the apparatus includes “a digital to analog converter” in addition to the “transmitting means” recited in claim 6, or if the “transmitting means” includes “a digital to analog converter.”

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 11-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 11 recites “a sensor placed on the body.” This recites a positive relationship to the human body. However, the human body is non-statutory subject matter and cannot be positively recited. Therefore, Applicant should amend the claim to recite

--a sensor adapted to be placed on the body--.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Bourgeois.

Bourgeois teaches a method for modulating body organ function including collecting waveforms from a body generated in the body; storing the collected waveforms; and transmitting one or more collected waveforms to the body organ to stimulate organ function. The collected waveforms are transformed from analog signals into a readable digital format for a processor.

7. Claims 6-9 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Leichsenr et al. Leichsenr et al. teach an electrical stimulator for tissue and nerve cell structures that is capable of modulating body organ functioning. The stimulator includes a computer forming a source of collected waveforms; means for transmitting at least one of the collected waveforms to a body organ; and means for applying the transmitted waveforms to the body organ via nerves. The transmitting means includes a digital to analog converter and the applying means can

include a body electrode. The computer stores the waveforms in a digital format and includes separate storage areas for different waveform categories.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourgeois in view of Leichsenr et al. Bourgeois, as discussed hereinabove, teaches all of the limitations of the claims except that the collected waveforms are stored according to function and that the collected waveforms are transmitted to a body via a digital to analog converter. Leichsenr et al., as discussed hereinabove, teach storing the collected waveforms according to function; and transmitting the collected waveforms to the body organ via a digital to analog converter to stimulate organ function. It would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to store waveforms collected by an apparatus similar to that of Bourgeois according to function in view of the teachings of Leichsenr et al. in order to efficiently locate desired collected waveforms based on a sensed condition. It would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to transmit the collected waveforms to the body organs using an apparatus similar to that of Bourgeois via a digital to analog converter in view of the teachings of Leichsenr et al. in order

convert the stored digital waveforms into an analog stimulation signal for application to the body.

10. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leichsenr et al. in view of Bourgeois. Leichsenr et al., as discussed hereinabove, teach all of the limitations of the claims except that the apparatus includes means for collecting waveforms from the body including a sensor, a recorder and an analog to digital converter. Bourgeois, as discussed hereinabove, teaches an apparatus for collecting and storing waveforms from a body organ and for transmitting waveforms to the body organ. The apparatus includes a sensor, a recorder and an analog to digital converter. It would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide an apparatus similar to that of Leichsenr et al. with a sensor, recorder and analog to digital converter similar to that of Bourgeois in order to collect the waveforms that are stored in the computer.

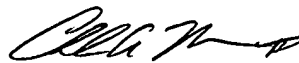
Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Burger teaches a modulation system and method for evoked response stimulation. Rosen et al. teach a microelectronic axon processor. Lerner teaches an apparatus for use in the determination of the condition of the vegetative part of the nervous system. Woodward teaches a medical data transmission system.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Marmor, II whose telephone number is (703) 305-3521. The examiner can normally be reached on M-TH (7:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



Charles A. Marmor, II
Examiner
Art Unit 3736

CAM
February 24, 2003